

Prepared by:

FEDERAL IRM
PLANNING SUPPORT PROGRAM
Office of Software Development
and Information Technology
Two Skyline Place, Suite 1009
5203 Leesburg Pike
Falls Church, Virginia 22041-3467
(703) 756-4000

February 1985

Strategic Information Resources Management Planning Handbook

Report OIT/FPSP-85/001

AND INFORMATION TECHNOLOGY

PREFACE

This handbook was prepared by the Federal IRM Planning Support Program, which provides information resources management (IRM) planning assistance to Government agencies. It contains the results of their research in this area and reflects their experience in assignments at various Federal departments.

The methodology presented will be helpful to all Government agencies who are interested in developing and implementing strategic IRM plans. It should be noted that although it is directed to agency level personnel, its concepts can be applied at all subordinate levels as well. It provides in "cookbook" format the essential elements of effective strategic IRM planning. For those agencies that already have strategic plans and/or planning processes in place it can also be a valuable tool. For example, it identifies proven and successful methods for collecting data, establishing planning groups, and organizing the plan itself. By following these guidelines, a strategic plan and a quality planning process can be developed and implemented that will be of major value to managers and users alike.

ACKNOWLEDGMENTS

The publication of this handbook is a culmination of the diligent work of many people. Through their research and practical experience working with Federal agencies, many members of the Federal IRM Planning Support Program provided individual contributions to the material presented in the handbook and suggested improvements. However, the leadership and untiring dedication of B. Gayle Lowe, IRM Planning Specialist, has served as the driving factor behind the handbook's ultimate completion.

The handbook significantly benefited from discussions with and reference materials provided by a number of IRM and planning executives representing both the public and private sectors. Of particular help were the customer agencies supported during the pioneer days of the Program: the Federal Aviation Administration, the General Services Administration, and the Indian Health Service.

Gratitude is also extended to Audrey Saunders of the GSA Records and Forms Management Branch, Office of Administrative Services, for her cooperation and support in designing and, during inevitable revisions to the handbook, modifying the data collection forms so integral to the strategic IRM planning methodology presented.

Also, acknowledgments would be incomplete without expressing sincere appreciation to Michele Garst for her efficient and enthusiastic support during the final preparation phases of publication.

Nancy J. Doane, Director Federal IRM Planning Support Program

TABLE OF CONTENTS

		Page
1.	፣ አጥ ዮ (DDUCTION
* •	1.1	Information Resources Management Planning
	1.2	Developing Agency "Strategic Plans"
	1.3	The Goal of the 5-Year Strategic Plan
	1.4	The Strategic Plan as a Management Tool
	1.5	Strategic Plans as a Budgetary Aid
	1.6	A Planning Methodology
2.	DEFIN	TITION OF TERMS
3.	LAUNC	CHING THE PLANNING INITIATIVE
	3.1	Identifying Planning Needs
	3.2	Organizing the Task Force
	3.3	Appointing the Review Committee
	3.4	Establishing the Executive Steering Committee 8
	3.5	Identifying Participants of the Various
		Planning Committees
	3.6	Documenting Agency Missions and Objectives 8
	3.7	Documenting Bureau Functions and Objectives 9
	3.8	Notifying Offices of the Planning Effort 9
4.	DEVEI	OPING THE PLAN - MONTH 1
	4.1	Examining the Scope of the Planning Effort 11
	4.2	Identifying Task Force Work Assignments 11
	4.3	Adopting the Policy of Systems Ownership
	4.4	Confirming Governing Policies
	4.5	Ensuring Issuance of Agency Policy Directives 15
	4.6	Identifying General Planning Assumptions and
		Constraints
	4.7	Issuing the Planning Call
5.		OPING THE PLAN - MONTH 2
	5.1	Training Bureau Representatives
	5.2	Preparing Individual Bureau/ Office Plans 51
	5.3	Writing Background Portions of the Plan
	5 /	Advising the Agency Head on Progress 52

5.	DEVE	LOPING THE PLAN - MONTH 3
	6.1	Examining and Summarizing Individual Bureau/Office
		Plans
	6.2	Briefing the Review Committee
	6.3	Integrating Responses and Analyzing Program Elements 5
	6.4	Developing a Draft of the Agency-Wide Plan 54
	6.5	Concurring on the Final Plan
7.	IMPL	EMENTING THE PLAN (ONGOING)
8.	INST	ITUTIONALIZING THE PROCESS (ONGOING)

LIST OF EXHIBITS

		rage
1.	Sample Plan Outline	10
2.	Functions and Objectives - Format A	. 12
3.	Instructions for Completion of Functions and Objectives -	. 17
•	Format A	10
4.	Operating Systems Catalog - Format B	. 17
5.	Instructions for Completion of Operating Systems Catalog -	. 21
٠.	Format B	20
6.	Needed Improvements - Format C	. 44
7.	Instructions for Completion of Needed Improvements -	. 25
, .	Format C	26
8.	Information Resources Management Activities List - Format D	. 20
9.	Instructions for the Completion of IRM Activities List -	. 21
٠.	Format D	20
10.	Summary of Resources Required - Format E	
11.	Instructions for the Completion of Summary of Resources	. 11
4.4.	Required - Format E	30
12.	Anticipated Benefits - Format F	. 37
13.	Instructions for the Completion of Anticipated Benefits ~	. 5/
	Format F	3.2
14.	Activity Summary by Information Resources Management	, 50
L++ •	Program Element - Format G	<i>l</i> .1
15.	Instructions for the Completion of Activity Summary by	. 41
	IRM Program Element - Format G	42
16.	Schedule by Information Resources Management Activity -	. 72
	Format H	43
17.	Instructions for the Completion of Schedule by IRM	. 43
1/.	Activity - Format H	1.1.
18.	Information Resources Management Planning Assumptions -	. 44
ro.	Format I	45
19.	Instructions for the Completion of IRM Planning	. 47
LY.	Instructions for the completion of the framing	46
20	Assumptions - Format I	. 40
20.	Systems Ownership - Koies and Kesponsibilities	· 4/

	, ,	, ,,		Talanti Talanti	Comments	. delines.

1. INTRODUCTION

1.1 Information Resources Management (IRM) Planning

The Paperwork Reduction Act of 1980 (P.L. 96-511) introduced the concept of IRM and the principle of information as a corporate resource which has value and associated costs. Certainly, the responsibility that is most far-reaching is that for developing a 5-year plan and annual updates for meeting Federal ADP and telecommunications needs. As a result of the growing obsolescence of automated information systems in the Federal sector it is obvious that the authors of the Paperwork Reduction Act recognized the severity of the situation, and levied this planning requirement in order to respond to the problem.

1.2 Developing Agency Strategic Plans

In developing agency IRM strategic plans, agencies should project their needs and resources for a 5-year period and update their projections on an annual basis or as significant changes occur in their plans.

A five-year perspective is important for all agencies. It facilitates future resource projections and ensures the compatibility of systems for future expansion. The ADP and telecommunications arenas are changing rapidly, making it difficult to anticipate technological trends and objectives. A 5-year plan enables an organization to forecast needs and resources to meet long-range goals and objectives. Because five-year plans should be updated annually, sufficient opportunities exist to modify or adjust longer term projections as a result of unexpected changes.

1.3 The Goal of the 5-Year Strategic Plan

The goal of the strategic planning process and plan is to ensure that Government information resources management--

- o Improves service delivery and program management;
- o Increases productivity;
- o Reduces waste and fraud; and,
- o Decreases the information processing burden for the Government and for persons who provide information to the Government.

Accordingly, the management of IRM is a vital function for all agency officials. Once in place, the strategic plan can serve as a management tool and aid the budget process.

1.4 The Strategic Plan as a Management Tool

An agency's 5-year IRM plan is a key management tool. It assists in examining current areas of application, identifying opportunities for improvement in the agency, and monitoring costs associated with technology and services. As an internal management tool, the plan can assist managers in avoiding the crisis-oriented approach to the management of these technologies. Properly used, plans can serve as building blocks for the entire organization. Strategic plans also supply a framework for delegating responsibility, defining responsibilities, and measuring performance.

1.5 Strategic Plans as a Budgetary Aid

Standardized planning documents containing required financial data tie back to the agency budget. This assists in identifying duplicative efforts, duplicative missions, existing information systems that might be candidates for common use, trends in information technology, agency components headed in diverse directions, and overly funded systems. Agencies should review their plans outside of the budget cycle when time exists to thoroughly pursue individual issues. The budget can then reflect solid decisions based on the analysis of the plan. Standardizing plans will also permit the development of some "average" dollar and personnel costs for comparison.

1.6 A Planning Methodology

This handbook presents a planning methodology which will assist agencies in identifying, collecting, and processing the information they will need to develop a 5-year strategic IRM plan. The methodology includes all the basic steps and timeframes necessary for agencies to develop an strategic IRM plan during a four-month interval from initial start-up to plan execution.

2. DEFINITION OF TERMS

The following terms and definitions are provided to clarify the vocabulary used in this handbook.

Information Resources Management means the planning, budgeting, organizing, directing, training, and control associated with the creation, collection, processing, transmission, dissemination, use, storage, and disposition of information, both automated and non-automated. It addresses the management of information itself as well as its related resources, including personnel, equipment, funds and the technologies of data processing, telecommunications, office systems, and information management.

"Data Processing" means the automated collection, storage, manipulation and retrieval of data including: Central processing units for micro, mini and mainframe computers; related peripheral equipment such as terminals, document scanners, word processors, intelligent copiers, off-line memory storage and printing systems, and related software such as operating systems, library and maintenance routines and applications programs.

"Telecommunications" means voice, data, message, and video transmissions, and includes the terminal, transmission and switching facilities of government and public telecommunications systems, as well as operating and network software.

"Office systems technology" means office equipment such as word processors and microcomputers; duplicating and photocopy machines, paper forms and records; microfilm and microfiche equipment; and printing equipment and services.

"Information management" means the overall management and control of the investment in information, including identification and sharing of management information needs; standardization, control and integrity of data stored or manipulated; statistical and records management activities; and the privacy of records and freedom of information.

"Services" means the providing and receiving of assistance for any aspect of information systems and networks.

Agency is any executive department or agency or independent establishment in the executive, legislative, or judicial branch of the government.

Strategic Planning is a structured, designed, process that produces an integrated plan of action for accomplishing identified program mission and objectives. It specifies activities to be pursued and defines resources required to support those activities. Long term planning emphasizes the definition of mission and identification of goals and objectives. It is a projection of where the agency expects to be at the end of a specified period of time. Strategic planning is the "action plan" - i.e., how the agency intends to get there. In the context of IRM it develops and documents the direction for the information technology program within the agency and specifies IRM activities and resource requirements necessary to achieve stated missions and objectives.

System is the collection of people, equipment, and methods organized to accomplish an activity.

Activity is a task(s) the office is accomplishing or plans to accomplish which is related to the IRM program and that requires the application of agency resources (money, personnel, etc.). An activity may be continuous or have well defined start and end points. IRM activities usually consist of requirements analyses; feasibility studies; development and implementation of new application systems; expansions, modifications or continued operation of existing systems; and non-system related efforts such as data administration, promulgation of standards and guidelines, or computer literacy training for functional managers.

Bureau/Office is a major organizational element reporting directly to the agency/department head.

Bureau Representative (User Representative) is a management official with broad knowledge of the bureau's IRM requirements necessary to support the bureau's mission and objectives.

Program Director is an office head who has overall responsibility for managing a major program(s).

Goal is a desired or needed result to be achieved by an agency over the long term. It does not necessarily have to be accomplished within the planning horizon. It is a valued outcome sought by the agency. Goals define the mission of the agency. They generally identify how the mission will be carried out. In addition, they reflect the style of the organization and the public image to be created and maintained.

Objective is a measurable result, not an activity, that management has agreed to accomplish within a specific time frame. It should be challenging yet attainable; its result should be relevant and worth doing. It is clearly understood by the agency and it is very specific.

Mission is a succinct description of the scope and purpose of the agency. It specifies what the agency's business is and what it should be.

Function is a role, responsibility and/or service which an organization accomplishes to support its objectives, goals, and mission.

IRM Governing Policies are the set of fundamental principles reflecting management's philosophies for applying information and its related resources to meet the organization's mission.

3. LAUNCHING THE PLANNING INITIATIVE

3.1 Identifying Planning Needs

Prior to initiating a planning effort, existing IRM planning mechanisms and documents should be reviewed. This review should identify current strengths that can be adopted and reinforced, weaknesses that can be corrected, and elements not previously considered which must be addressed. This task should be accomplished at the bureau/staff office level of the agency, although coordinated at the agency level.

The benefit of this review effort is to identify components of the existing process which can be modified and focused towards a standardized methodology.

Prior to initiating the planning effort, three groups of individuals within the agency should be designated. The following subsections describe these groups, their roles and their longevity.

3.2 Organizing the Task Force

A special task force (temporary in nature) should be established at the agency level and charged with the responsibility for developing the agency's 5-year strategic IRM plan. The Task Force leader should be a key member of the agency's management team, and perhaps a member of the agency head's immediate staff, so as to reflect the high priority of this task and to ensure its success. Each bureau and major staff office should be represented on the task force with additional members drawn from IRM program offices.

The Task Force should be established for a fixed period of time with a specific deadline for completion of the plan. In order to meet the short timeframes outlined in this handbook, top management interest and involvement must be maintained, and the priority of the effort emphasized.

3.3 Appointing the Review Committee

At the same time the Task Force is organized, a Review Committee should be established, comprised of key agency officials charged with responsibilities that relate to managing agency IRM programs and management systems. This group will provide viability and integrity to the planning effort, and approve the plan during its various stages of development. Once the plan is implemented, this committee will be dissolved.

3.4 Establishing the Executive Steering Committee

The state of the s

It is essential to elicit top management support from the outset. If not already in place, an Executive Steering Committee for IRM should be established. This Committee is extremely important to the success of the planning effort and should be chaired by the Senior Information Resources Manager as designated by the requirements of the Paperwork Reduction Act. Other members should be Bureau Heads representing major user or related policy organizations.

The functions of this committee are to ensure: that agency-wide missions, goals, and objectives are properly reflected and incorporated into the planning process; that bureau plans are sufficiently comprehensive and complete; that bureau plans are not redundant or overlapping; and that once approved, implementation of the agency-wide plan is accomplished as scheduled. This Committee serves as a permanent advisory and policy setting body.

3.5 Identifying Participants of the Various Planning Committees

All persons involved in the planning effort should be identified by means of an official intra-agency announcement. Besides listing the name, office symbol and telephone number of each individual, a brief synopsis of the functional responsibilities of each committee should be included, so that as much information as possible can be disseminated regarding the planning effort.

3.6 Documenting Agency Missions and Objectives

The Task Force reviews and, subject to Steering Committee approval, confirms the agency's mission and program objectives. The Task Force then arranges the mission and objectives numerically and concisely for easy reference in the individual plans developed by program offices. This is necessary because the planning strategy is concerned with the technological future of the entire organization. Unless the objectives are written in a

fashion that applies directly to the mission of the agency, this document may have little meaning. In that case, agency personnel may go about their tasks, disregarding the formally issued objectives, either because they are too broad or non-applicable to their particular area of operation. In any case, it is absolutely necessary to identify the full range of agency missions and objectives and their priority.

3.7 Documenting Bureau Functions and Objectives

The Task Force is now ready to review subordinate Bureau functions and objectives, referencing by number how they support the agency's mission and program objectives. This review clarifies the relationship of the functions and objectives of the component part to those of the entire agency. Likewise, each planned IRM activity, as set forth in the plan, should support an agency or bureau objective.

3.8 Notifying Bureaus/Offices of the Planning Effort

The Task Force prepares and issues a memorandum for signature of the agency head, announcing to all key officials the establishment of the Task Force and their expected support and cooperation in developing the agency's 5-year strategic IRM plan. This document should include a request for designation of program officials from each major organizational unit (bureau representatives). These bureau representatives will be responsible for preparing individual bureau plans, which will serve as the foundation for the agency plan.

,

4. DEVELOPING THE PLAN - MONTH 1

4.1 Examining the Scope of the Planning Effort - Week 1

Using the outline at Exhibit 1, the Task Force is now ready to consider the scope of the planning process, including items to be addressed, timeframes for completion, and agency IRM and Paperwork Reduction Act implications. The Task Force should compose a draft plan summary that reflects the recommended outline and contains individual agency needs and circumstances. This draft will serve as the fundamental plan content and structure. In addition to identifying the items to be included, it is important to also note what will not be included: i.e., matters considered outside the scope of the planning effort. If there is disagreement on any given items, they should be brought to the attention of the Review Committee, the IRM Steering Committee, or, if necessary, the agency head for a final decision.

4.2 Identifying Task Force Work Assignments - Week 1

The Task Force should prepare to manage the process that the bureaus will use to develop their individual plans and to prepare the integrated agency-wide plan. This involves--

- o Refining the planning methodology, if needed;
- o Documenting the fundamental policies that govern the agency's IRM program;
- o Ensuring designation of a single representative for each major IRM user organization responsible for preparation of its individual plan;
- o Assisting each of these bureau representatives with the planning methodology and providing technical advice in preparing individual plans;
- o Briefing the Review Committee at suitable points in the planning cycle on status and content of the agency plan;
- o Assembling the input from each bureau; and
- o Developing the 5-year IRM strategic plan for the agency.

VOLUME I - AGENCY SUMMARY

INTRODUCTION

Background Purpose and Objectives of the Plan

AGENCY MISSION AND ORGANIZATION OVERVIEW

Agency Mission Program Objectives Agency Organization

CURRENT ENVIRONMENT

Program Management Information Management Hardware Software Transmission Services

THE PLAN

Governing Policies
Information Resources Management Objectives
Information Resources Management Activities
The Plan by IRM Program Element
Program Management
Information Management
Hardware
Software
Transmission Services
Resources Required
Return on Investment
Priorities
Schedule
Plan Management and Tracking

VOLUME II

COMPILATION OF PROGRAM OFFICES PLANS (by Bureau*)

Summary
Program Mission and Objectives
Needed Improvements (by IRM Program Element)
Information Resources Management Activities
Resources Required (by Activity, by Fiscal Year)
Return on Investment (by Activity, by Fiscal Year)
Activity Summary (by IRM Program Element)
Schedule (by Activity)
Assumptions

*For the Information Resources Management central organization(s), special emphasis should be placed on support to the overall agency mission and the objectives of program offices.

VOLUME III

INVENTORY OF APPLICATION SYSTEMS (by System Owner)

Sample Plan Outline

An individual member from the task force is assigned to each bureau to provide appropriate interface. This individual ensures a common understanding of the agency policies regarding IRM; clarifies instructions and corrects misunderstandings relating to the information collected; assists in the adoption of user-oriented planning within the bureau offices; and acquires a good working knowledge of individual bureau plans.

Other responsibilities of Task Force members are--

- o Summarizing various aspects of the plan from an agency-wide perspective;
- o Analyzing and identifying duplicative activities, and modifying the plan as necessary;
- o Reviewing and editing the final plan: its form, design, structure and content; and
- o Preparing the final package and arranging printing and distribution of the finished product.

The forms contained at the end of this Chapter are the primary data collection vehicle for the Task Force. When completed, they should be carefully reviewed to verify that complete and accurate data has been captured. See Exhibits 2 through 19, and Section 4.7 "Issuing the Planning Call."

4.3 Adopting the Policy of Systems Ownership - Week 2

An important policy that must be adopted agency-wide is one that decentralizes responsibilities for information systems to the users of these systems. Program managers are responsible for making programmatic decisions based upon the information produced by their support systems. It only follows that those same program managers must assume responsibility for their information systems, defining their requirements and allocating adequate personnel and financial resources to them. These "systems owners" are individuals other than the ADP support organization, unless the system serves that particular organization, responsible for the accuracy, completeness and timeliness of systemoutputs. Ownership is also assigned for component parts of the system, e.g., application software, the hardware and the data. The agency 5-year strategic plan is based on the plans prepared by these responsible program managers. See Exhibit 20.

4.4 Confirming Governing Policies - Week 2

When developing a strategic IRM plan, it is critical that the the strategic direction for managing the agency's information resources be clearly communicated. IRM Governing Policies, reflecting the fundamental principles that will guide the agency's management of its IRM program, are developed and documented by the Task Force, endorsed by the Review Committee, and confirmed by the Executive Steering Committee.

To ensure comprehensiveness of the plan, various elements of an agency's IRM program should be considered. These elements constitute the basic framework for the agency's IRM program and the planning effort. They are—

- o IRM Program Management the overall management and control of IRM activities:
- o Information Management the overall management and control of the agency's investment in information, including identification and sharing of management information needs; standardization, control and integrity of data stored or manipulated; statistical and records management activities; and the privacy of records and freedom of information:
- Hardware the ongoing operation, enhancement, modification, addition, removal or maintenance of equipment supportinginformation systems;
- o Software the acquisition, development, ongoing operation, enhancement, modification, conversion or maintenance of computer programs; and
- o Transmission Services the acquisition, development, ongoing operation, enhancement, modification, or maintenance of the means of transmitting information between locations.

These elements provide a structure for addressing key IRM policy and strategy issues that confront agency managers and for organizing the agency's IRM Governing Policies. They also serve as the foundation for agency-wide as well as individual bureau/office IRM plans.

4.5 Ensuring Issuance of Agency Policy Directives - Week 3

It is extremely important that a common understanding of responsibilities and objectives are firmly established for the agency's IRM program. Documents establishing the policy foundation that guides the Task Force and assists program managers in identifying areas in need of improvement are-

- o The agency mission(s) and bureau function(s) statements;
- o The governing policies for IRM; and
- o The "systems ownership" document, specifying information system roles and responsibilities.

If any of these documents are not in place at this stage of the planning effort, they should be drawn up by the Task Force and coordinated with the Review Committee. Once reviewed and endorsed by this Committee, they should be incorporated into the planning guidance distributed to the Bureaus and issued to agency personnel through the directives system, upon formal adoption by the Executive Steering Committee.

4.6 Identifying General Planning Assumptions and Constraints - Week 3

Throughout the planning process it will be necessary to make certain assumptions. Documenting these assumptions and any existing constraints provides for appropriate modification of the plan when these assumptions and constraints change. Some planning constraints are considered general in nature and will be applied throughout the agency. Such constraints include projected staffing and funding limitations. The Task Force is responsible for identifying and/or collecting documented agency constraints and incorporating them into the planning guidance distributed to all program managers.

4.7 Issuing the Planning Call - Week 4

The Task Force should review the forms that will be used by bureau representatives in preparing their IRM plans. Following the general outline for the plan, the forms ask program managers for specific information on all aspects of their IRM program. Within the context of the agency mission and their overall program function, program managers are able to evaluate their current systems environment, project future information requirements, and identify their plans for meeting them. Itemized activities contained in the plans include only those efforts which are to be accomplished within known resource constraints.

Accompanying instructions contain the purpose of the forms and define the data elements requested. (The Task Force should provide the bureau representatives with as much supporting information or previously prepared material as possible to facilitate completion of these forms.) The formats and instructions that follow (Exhibits 2-19) are suggested for collection of the planning data within the bureaus as well as for consolidating bureau-wide information to be submitted to the Task Force.

Identification of IRM personnel and costs is likely to be difficult. Probably inconsistent definitions have been used previously for identifying classifications and categories of personnel whose full or partial salary costs would be considered as IRM costs. A further difficulty, encountered as a result of placing functional responsibilities with IRM users, involves the assessment of costs for centralized user support (hardware, operation, and software development) at the user activity level. The Task Force, in assisting bureau representatives, formalizes the definition of cost categories in a fashion that will lend itself to the agency's budget cost categories and is consistent with OMB guidelines (OMB Circulars A-121, "Cost Accounting, Cost Recovery and Interagency Sharing of Data Processing Facilities." and A-11, "Preparation and Submission of Budget Estimates" Exhibit 43, "Data on Acquisition, Operation, and Use of Information Technology Systems".)

This month's efforts culminate in the issuance of an agency planning guide by the Task Force. This package contains: (1) a statement of the purpose and scope of the planning effort; (2) the appropriate data collection forms and accompanying instructions; (3) the agency's governing policies for IRM, including definitions of the IRM program elements; (4) the "systems ownership" document; (5) agency mission and objectives statements; and, (6) areas of emphasis to be considered during the planning effort. A covering memorandum to this package, signed by the agency head, is directed to bureau heads with a copy to each bureau representative and subordinate office head. This memorandum expresses the need for active involvement of all concerned parties in this project and a firm commitment to the established timeframes for completion.

The planning effort now moves into the next phase with the bureau representative concentrating activity on assistance to subordinate organizations in the development of their IRM plans.

FUNCTIONS AND OBJECTIVES	
1. Bureau/Office	
2. Bureau/Office Function(s)	Agency Mission(s) Supported
1.	i
2.	
3	
4	
5	
6	!
3. Bureau/Office Objective(s) Bureau/Office Function(s) Supporter	Agency d Obj. Supported
1.	
2.	-
3	<u></u>
4.	
4.	
5.	
6.	
	FORMAT A

4. MANAGEMENT STRUCTURE FOR INFORMATION RESOURCES MANAGEMENT PROGRAM (Organisation chart)	
	i
	i
	•
	•
S. NARRATIVE	
	1
	i
	i
	i
	:
	;
	i
	FORMAT A BACK

EXHIBIT 2A: Functions and Objectives - Format A (Continued)

INSTRUCTIONS FOR COMPLETION OF, FUNCTIONS AND OBJECTIVES FORMAT A

The purpose of this form is to document the bureau/office functions(s) and objective(s) and to show which of the agency's mission(s) and objectives(s) they support. Also, this form provides space to diagram an organizational chart that identifies how and where IRM is organized within the bureau/office and to describe mechanisms that have been or will be established to ensure proper planning, budgeting, coordination, and evaluation of IRM activities.

- 1. BUREAU/OFFICE: Insert the name of the bureau/office or other organizational unit completing this document.
- 2. BUREAU/OFFICE FUNCTION(S): List bureau/office functions, using style and language similar to that of the agency mission(s). A function includes a role, responsibility or service which the bureau/office performs to support agency mission(s), goals, and objectives.
 - AGENCY MISSION(S) SUPPORTED: Insert the number(s) of the agency mission(s) which the bureau/office function(s) support.
- 3. BUREAU/OFFICE OBJECTIVE(S): List the bureau/office objective(s) that support the bureau/office function(s) listed. An objective is defined as a measurable result to be achieved during a specific time frame.
 - Also, list the number of the bureau/office function(s) and agency objective(s) supported by each objective listed.
- 4. MANAGEMENT STRUCTURE FOR INFORMATION RESOURCES MANAGEMENT PROGRAM: Diagram an organizational chart identifying how the information resources management program is organized and where it resides within the bureau/office.
- 5. NARRATIVE: Enter in this field a brief description of the processes and procedures to be used to ensure effective planning, budgeting and management of the bureau/office information resources.

EXHIBIT 3: Instructions for Completion of Functions and Objectives - Format A

-20-

OPE	RATIN	G SY	STEMS CATA	LOG				l
8ECTION	I - GEN	ERAL	SYSTEMS INFO	RMATION				
1. SYSTEM TITLE					2. DATE OF	IMPLEMENTAT	ION	
S. BUMMARY SYSTEM DESCRIPTION	•	***************************************			I			
		7		···				
AA. SYSTEM STATUS (Check only one box and complete Ite ROUTINE ENHANCE DISCONTINUE (Complete (8))	INA	CTIVE	REPLACE (Complete (B and 4C)	48 DATE		4C. NAME OF R MENT SYST	EM	CE.
8			STEM CONTRO)L				
SA. NAME OF BUREAU/OFFICE WHICH OWNS SYSTEM S. NAME OF SOFTWARE OWNER (Bureau/Office, Governm			DESIGNATED O	WNER OF RECO	AD.	SC, TELEPHÓN	END	
				*****			,	
7. ORGANIZATION(S) SUPPORTED	IN- PUT	PUT		SYSTEM INT	HFACE(S)	B. ACRONYM	IN PUT	OUT-

	SECTIO	N III	- HARDWARE	·····			L	
	9 MAJ	OR PR	OCESSOR(S)					
A, MAKE/MODEL/SERIES					OWNER			-
10. TERMINA	L PROCE	SSOR	S AND SPECIAL	EQUIPMENT				
A. EQUIPMENT TYPE				B. MAKE	MODEL/SER	ies		
						···		
	SECTIO	N IV -	- SOFTWARE					
11 LANGUAGE/PAÇKAGE	NAME			12 NO. OF P	ROGRAMS	13 NO OF	LIN	ES
BECTION V - SCHEDUL	ED OPE	RATK	NS/COST/PLA	ACTIVITY	EFERENCI	V Trans	440	<u> </u>
14. FREQUENCY 118. DAY AND TIME			is. Estimated A	MAUAL COST	17. ACTIVIT NO(S)	Y 18. RE	rivit (s)	Ÿ
							FOR	MAT B

EXHIBIT 4: Operating Systems Catalog - Format B

INSTRUCTIONS FOR THE COMPLETION OF OPERATING SYSTEMS CATALOG FORMAT B

In order to plan an effective course for achieving IRM objectives, it is necessary to develop an understanding of the current information systems environment. This will be done primarily through an examination of those information systems, both automated and non-automated, which the bureau/office presently owns.

Section I - GENERAL SYSTEMS INFORMATION

- 1. System Title: Enter the identifying name of the system and its acronym, if any.
- 2. Date of Implementation: Enter the year the system became operational.
- 3. Summary System Description: Write a brief description of the system and its purpose.
- 4.A. System Status: Make an entry (X) in only one block. The entry should describe the current status of the system.

Routine Maint .: Undergoing routine maintenance and operation. No significant changes being made.

Enhance: Being upgraded or improved and keeping system identity. In block 4.B. put the date enhancement will be completed.

Discontinue: In the process of phasing out. In block 4.B. put the date when the system will be discontinued.

Inactive: Presently not in use. In block 4.B. enter the date when system reactivation or disposition will be decided.

Replace: In the process of modifying the method of meeting the system requirement by incorporating it into a new or differently named system. In blocks 4.B. and 4.C. put the date when the system will be replaced, and the name of the replacement system.

EXHIBIT 5: Instructions for Completion of Operating Systems Catalog - Format B

Section II - SYSTEM CONTROL

5.A. Name of Bureau/Office which Owns the System: Enter the name of bureau/office that owns the information system.

- 5.B. Name of the Designated Owner of Record: Enter the name and correspondence symbol for appropriate point of contact.
- 5.C. Telephone Number: Enter the telephone number of the designated owner of record.
- 6. Name of Software Owner: Enter the name of the bureau/office, Government agency, proprietor, etc., which owns the application software.
- 7. Organization(s) Supported: List the bureau/office(s), Government agencies, etc., which enter or receive data from the system. Place an "X" in the appropriate column(s) to identify whether each organization provides input to or relies on output from the system (or both).
- 8. System Interface(s): List the system name and acronym of the system(s) whose processing directly affects or is affected by this system. Place an "X" in the appropriate column to identify whether the interface relates to system input or output.

(To be completed if system is automated)

Section III - HARDWARE

- 9. Major Processor(s)
 - A. Make/Model/Series: Enter the manufacturer's make, model, and series identification for the equipment.
 - B. Owner: Enter the name of the bureau/office, Government agency, company, etc., which owns the equipment.
- 10. Terminal Processors and Special Equipment
 - A. Equipment Type: Enter the descriptive name(s) of secondary processing equipment used for the system; e.g., interactive terminals, data entry terminals, remote job entry (RJE) terminals, etc.
- EXHIBIT 5A: Instructions for Completion of Operating Systems Catalog Format B (Continued)

B. <u>Make/Model/Series</u>: Enter, below the appropriate equipment type(s), the manufacturer(s)' make, model, and series identification for your secondary processing equipment.

Section IV - SOFTWARE

11. Language/Package Name: List the programming language(s) used. If a vendor's software package(s) is(are) used, enter the package name(s) and, if known, the programming language. For software packages, enter N/A in Columns 12 and 13.

- 12. No. of Programs: Enter the total number of programs written in each of the programming languages listed in Column 11.
- 13. No. of Lines: Enter the total number of lines of program code written in each of the programming languages listed in Column 11. (A reasonable estimate, rounded to the nearest thousand (000), is acceptable.)

Section V - SCHEDULED OPERATIONS/COST/PLAN ACTIVITY REFERENCE

- 14. Frequency: Enter the frequency of scheduled operations for this system.
- 15. Day and Time: Enter the day(s) of the week or month, and the time(s) of day processing is scheduled for this system.
- 16. Estimated Annual Cost: Enter the estimated costs for the entire current fiscal year to support this system.
- 17. Activity No.(s): After completion of the IRM Activities List (Format D), return to this form and enter the activity number(s) of the IRM activity(ies) which directly relate(s) to this system. If multiple entries are appropriate, separate each entry with a comma.
- Related Activity No.(s): Enter the activity number(s) from the IRM Activities List (Format D) for those IRM activities expected to have an impact on this system. If multiple entries are appropriate, separate each entry with a comma.
- EXHIBIT 5B: Instructions for Completion of Operating Systems Catalog Format B (Continued)

NEEDED IMPROVEMENTS (FY TO FY)	2. INFORMATION RESOURCES MANAGEMENT PROGRAM ELEMENT (Check one) IRM PROGRAM MANAGEMENT HARDWARE TRANSMISSION SERVICES INFORMATION MANAGEMENT SOFTWARE	eNT 4. RELATED ACTIVITY(IES)			
). BUREAU/OFFICE	3. NEEDED IMPROVEMENT			

EXHIBIT 6: Needed Improvements - Format C

INSTRUCTIONS FOR COMPLETION OF NEEDED IMPROVEMENTS FORMAT C

The purpose of this document is to state the IRM improvements needed in light of bureau/office program plans and conformance with the underlying strategies which will govern the agency's IRM program. For each IRM program element complete a separate document.

- 1. BUREAU/OFFICE: Insert the name of the bureau/office completing this form.
- 2. IRM PROGRAM ELEMENT: Check the appropriate IRM program element this document pertains to. (Five forms will be completed by each bureau/office.)
- 3. NEEDED IMPROVEMENT: List the major problem(s) or deficiencies that the bureau/office faces for each of the IRM program elements. Describe problems or deficiencies to a level such that no more than five items will cover the full scope of concern for each IRM program element.
- 4. RELATED ACTIVITY(IES): After completion of the IRM Activities
 List (Format D), return to this form and enter the activity
 number(s) of the IRM activity(ies) that will alleviate the
 problem or deficiency and help achieve the needed improvements.
 If multiple entries are appropriate, separate each entry with a
 comma.

EXHIBIT 7: Instructions for Completion of Needed Improvements - Format C

1. BUREAU,OFFICE	INFORMATION RESOURCES MANAGEMENT ACTIVITIES LIST $fY = TU \ FY = -1$	LIST				
2. ACTIV. ITY	3 NAME AND DESCRIPTION	4. CATEGORY	5 AGENCY MISSION	6. BUREAU	7. OBJEC- TIVES	SS
			<u>\$</u>	1.0%	4	8
						<u>i</u>
I. REMARKS						±00
					FORB	FORMAT D

EXHIBIT 8: Information Resources Management Activities List - Format D

INSTRUCTIONS FOR THE COMPLETION OF IRM ACTIVITIES LIST FORMAT D

The purpose of this document is to list the IRM activities the bureau/office plans to accomplish during the period of FY through FY. An activity is something the bureau/office plans to accomplish that is related to the IRM program and that requires the application of agency resources (money, personnel, etc.). Activities should be succinctly defined to facilitate overall planning, budgeting, and monitoring of the IRM program. The total resource expenditures for all activities within a fiscal year should represent the total IRM program expenses for that fiscal year. An activity may be continuous or have well defined start and end points. It may be related to either a single or multiple application system(s) or to an IRM program element objective that is unrelated to any specific application system(s).

- 1. BUREAU/OFFICE: Insert the name of the bureau/office completing this form.
- 2. ACTIVITY NUMBER: Number each entry sequentially.
- 3. NAME AND DESCRIPTION: Enter the activity name and a concise description for each IRM activity to be pursued during the planning period. Where appropriate, describe an activity so as to associate it with the specific system(s) it affects.
- 4. CATEGORY: Enter the code, as defined below, that applies to this activity. Only one code can be assigned to an activity.
 - Code l* This activity is designed to improve or enhance an existing system or program.
 - Code 2* This activity is in response to a new requirement, necessitating a total system redesign, a new development effort, or a new initiative.
 - Code 3 This activity is designed to continue operation of and/or maintain an existing system or activity.
 - * Activities falling in these categories will require, as instructed, an entry on Format F (Anticipated Benefits).
 - EXHIBIT 9: Instructions for the Completion of IRM Activities List Format D

5-7. AGENCY MISSION; BUREAU/OFFICE FUNCTIONS; OBJECTIVES: The purpose of these columns is to provide linkage between the mission(s) of the agency, bureau/office function(s), and agency ("A") and bureau/office ("B/O") objective(s). For each column, enter the appropriate numeric code(s) of the mission(s), funtion(s) and objective(s) supported by the IRM activity. (Bureau/office functions and objectives are listed on Format A).

Where an activity supports more than one agency mission, provide in the appropriate column a percentage breakdown that could be used to prorate that activity's total cost across those missions. If multiple entries are appropriate, separate each entry by a comma.

8. REMARKS: This is an optional field to be used by the preparer.

Enter in this field any information needed to further explain or support the entries on this form.

EXHIBIT 9A: Instructions for the Completion of IRM Activities List - Format D (Continued)

				SUMN	ARY OF	RESOURCE TO FY	ES REQU	IRED		
1. 60	REAU/O	FFICE								
ACT NO	RI	SOURCES			3. FISC	AL YEAR		BEYOND	4. TOTAL (FY thru FY and beyond)	B. LIFE CYCLE ANTICIPATED COST (\$000's)
NU	FTE (F	ull Time (ulvoiency)		 			 	BETONO	and beyond)	COST (\$000's)
Ī		PERSONNEL		 			 	 	 	┨
	BUDGE	EQUIPMENT					<u> </u>		·	1
	(\$000's)	CONT SUP.						·		1
		OTHER]\$
	FTE (F.	ull Time (ulvalency)	<u> </u>				<u> </u>			
		PERSONNEL						J]
	BUDGET	EQUIPMENT				<u> </u>		ļ <u>.</u>	<u> </u>	
	10000 1	CONT. SUP.								łs
	FTE (F		 					 		 *
		PERSONNEL		 		 	 	<u> </u>		ł
	BUDGET	EQUIPMENT						 		1
	(\$000 1)	CONT. SUP.				 		 	†—————	1
	<u> </u>	OTHER								[\$
	FTE (P	ull Time ufvalency)								
		PERSONNEL						<u> </u>		1
	BUDGET	EQUIPMENT								[
	(\$000%)	CONT. SUP.						<u> </u>		
		OTHER		 		ļ		ļ		\$
	FTE (F)	uivalency)		<u> </u>		<u> </u>		<u> </u>		<u> </u>
		PERSONNEL		<u> </u>	.	<u> </u>	ļ			
	BUDGET (\$000's)	EQUIPMENT CONT. SUP.	 	 		 				ł
- 1		OTHER	 	 	 	 	}	 		s
	FTE (Pu		1		 					
		PERSONNEL	┽	}	 	 		ļ	<u> </u>	ł
ļ	BUDGET	EQUIPMENT			 	 	<u> </u>	 	··· <u> </u>	
	(\$000's)	CONT, SUP.	······································	 		 			·	
		OTHER		<u> </u>						\$
[FTE (Fu Bei	ill Time ulvelency)								
ĺ	-	PERSONNEL								
	BUDGET	EQUIPMENT								
l	190001)	CONT. SUP,	 	 	<u> </u>					s
		·	 		 		<u> </u>			3
3. TO	TAL FY	FTE							·	
	ĺ	PERSONNEL		L						
7. TO	ייאנ ז	EQUIPMENT		}						
Y	CAL EAR	CON TRACTOR SUPPORT							_	
	STS I	OTHER								
		TOTAL	\$	\$	\$	\$	\$	\$	\$	\$
										FORMAT E

EXHIBIT 10: Summary of Resources Required - Format E

INSTRUCTIONS FOR THE COMPLETION OF SUMMARY OF RESOURCES REQUIRED FORMAT E

The purpose of this document is to identify the resources required in terms of people and dollars to accomplish the activities described in the IRM Activities List (Format D) for the planning period. Totals are computed by fiscal year to show resources required.

In order to more closely conform to the requirements of the Office of Management and Budget (OMB) Circulars A-121 and A-11 and to provide consistent costing information for analysis of IRM related expenditures, the definition of IRM costs should be the same as those in the "Data on Acquisition, Operation, and Use of Information Technology Systems (Exhibit 43A)," required by OMB. This information will then be useful for both planning purposes and as a basis for input to the 43A report.

- 1. BUREAU/OFFICE: Insert the name of the bureau/office completing this form.
- 2. ACT. NO: Enter sequentially the activity number from the IRM Activities List (Format D).
- 3. FISCAL YEAR INFORMATION: Insert the fiscal year for each year of the planning period.

For each fiscal year (FY through FY, and aggregate for beyond FY), people and dollar information is required, captured at the activity level. Dollar figures are expressed in thousands (\$000). Totals are obtained by fiscal year (FY through FY and Beyond) for individual categories. Total life cycle anticipated costs by activity number (Act. No.) are also computed.

Definitions of IRM related costs are consistent with those contained in Exhibit 43A. Costs should be initially captured by subcategories identified in Exhibit 43A to permit completion of that form and then consolidated into five categories: FTE; Personnel; Equipment; Contractor Support; and Other.

EXHIBIT 11: Instructions for the Completion of Summary of Resources Required - Format E

These categories are defined as follows:

FTE - (Full Time Equivalency): Enter, based on your best estimate, the total FTE to be spent on IRM functions by all personnel associated with this activity (e.g., systems development and operational personnel, policy and management officials, etc.) However, FTE should not be reported for personnel who may use the system described in this activity which is incidental to the performance of their primary function.

FTE to be specifically included in this category are defined as follows:

- 1. Personnel assigned to an organization whose mission is to provide IRM support;
- 2. Personnel in job series 330, 332, 334, 335, 343, 345, 391, and 393, who provide information system support;
- 3. Personnel who spend more than 50 percent of their time performing IRM related work. This includes requirements definition, systems testing, information systems studies, etc., when the function performed by the individual is to act as an interface between the end user and the IRM organization; and,
- 4. Personnel whose sole function is to enter data into an information system via data entry equipment. Specifically excluded are non-clerical individuals who use interactive terminals as a tool in the performance of their work and are not included in the above categories.

PERSONNEL: Enter total personnel compensation, personal benefits, and travel for FTE identified to support this activity.

EXHIBIT 11A: Instructions for the Completion of Summary of Resources
Required - Format E (Continued)

EQUIPMENT: Enter the amount required for equipment needed to support this activity. This category includes central processing units, peripheral devices, input/output devices, modems, multiplexors, message processors, terminals, etc., to be purchased or leased by the bureau/office. Also included are purchases of unique support software and equipment (e.g., proprietary software, operating systems software, data entry keypunch/key verify equipment, off-line message reproducer, special purpose furniture, etc.; specifically excluded is applications software) and maintenance and software furnished as a part of a lease arrangement.

CONT. SUP. (Contractor Support): Enter all obligations where payments are to be made directly to private contractors for commercial services in support of this activity. This category includes the following obligations or contracts:

- 1. Network services or facilities including obligations associated with Government-owned, contractor-operated (GOCO) facilities:
- 2. Facility management and teleprocessing services contracts;
- 3. Computer systems time and other incidental support services (e.g., data base maintenance, application assistance, etc.);
- 4. Leased point-to-point, multi-point, and switched telecommunications services;
- 5. Services associated with operation and maintenance of bureau/office owned IRM equipment and data entry support functions, including system software programmer support, maintenance and operation of tape/disk libraries, and data entry, keypunch/key verify services;
- 6. Applications and/or systems development support such as applications systems design, analysis, and/or programming services:
- 7. Design and/or development of services, networks, or facilities; and,
- 8. Management or feasibility studies, technology forecasts, requirements definition, consulting services, and training.
 - B: Instructions for the Completion of Summary of Resources Required Format E (Continued)

OTHER: Enter all other costs needed to support the activity. The following types of costs should be included in this category:

- 1. Required site construction or modification;
- 2. Leased space required for operation and office space of Government or contractor personnel, including basic utilities and housekeeping services (SLUC);
- 3. Other in-house operating expenses such as supplies, purchased or leased applications software, and directly related non-commercial training for in-house personnel;
- 4. Payments to other Government agencies for IRM services, including payments to GSA for reimbursable services, TSP contracts and FTS usage:
- 5. Payments made within the agency to another bureau/office for IRM support services, including payments for systems and programming support and computer time; and,
- 6. All offsetting collections received from other Government agencies for IRM support services provided. (To be enclosed in parentheses).

Any entry placed in this column should be footnoted and briefly explained on an attached sheet of bond paper.

- for FTE, Personnel, Equipment, Contractor Support, and Other for each IRM activity.
- 5. LIFE CYCLE ANTICIPATED COST (\$000's): Total the fiscal years costs for each IRM activity and enter the life cycle anticipated cost, expressed in thousands (\$000), for each activity.
- 6. TOTAL FY FTE: Compute the total for FTE by fiscal year.
- 7. TOTAL FISCAL YEAR COSTS (\$000's): Total the dollars by fiscal year of all IRM activities for each cost category: Personnel, Equipment, Contractor Support, and Other. Calculate total fiscal year costs and a total life cycle anticipated cost, expressed in thousands (\$000).
- EXHIBIT 11C: Instructions for the Completion of Summary of Resources
 Required Format E (Continued)

2. ACTIVITY ANTICIPATED NUMBER SAVINGS COST AVOIDANCE SAVINGS COST AVOIDANCE SAVINGS COST AVOIDANCE COST AVOIDANCE SAVINGS COST AVOIDANCE SAVINGS	PATED FITS IDANCE IDANCE IDANCE		2 EISTAI VEAB					
2 ACTIVITY ANTICIP NUMBER BENET SAVINGS COST AVO COST AVO SAVINGS COST AVO SAVINGS SAVINGS SAVINGS	PATED FITS IDANCE IDANCE IDANCE IDANCE		V LATER C					
NUMBER BENEF SAVINGS COST AVO	IDANCE HDANCE HDANCE HDANCE		2	EAH			4. LIFE CYCLE ANTICI-	5 NARRATIVE
SAVINGS COST AVO SAVINGS SAVINGS COST AVO COST AVO SAVINGS	IDANCE IDANCE IDANCE IDANCE					BEYOND	PATED BENEFITS (\$000's)	
SAVINGS COST AVO SAVINGS COST AVO COST AVO SAVINGS	IDANCE IDANCE INDANCE							
SAVINGS COST AVO SAVINGS COST AVO SAVINGS	IDANCE HDANCE HDANCE HDANCE							
SAVINGS COST AVO SAVINGS	IDANCE HDANCE HDANCE							
SAVINGS COST AVO SAVINGS	HDANCE							
COST AVO	HDANCE HDANCE					· :		
SAVINGS	HDANCE	1						
	NDANCE				-			
COST AVOIDANCE								
SAVINGS								
COST AVOIDANCE	HDANCE							
SAVINGS								
COST AVOIDANCE	NDANCE							
SAVINGS		·						
COST AVOIDANCE	HDANCE							
SAVINGS				***********				
COST AVOIDANCE	HDANCE							
SAVINGS								
COST AVOIDANCE	HDANCE							
SAVINGS							:	
COST AVOIDANCE	NDANCE							
SAVINGS								
COST AVOIDANCE	NDANCE							
6. TOTAL BAVINGS	AVINGS	-						
7, TOTAL COST AVORDANCE	#DAMCE							
8. TOTAL ANTICIPATED BENEFITS	ENEFITS							
						:		FORWAT F

EXHIBIT 12: Anticipated Benefits - Format F

INSTRUCTIONS FOR COMPLETION OF ANTICIPATED BENEFITS FORMAT F

The purpose of this document is to identify either a savings or a cost avoidance (or both) that would result from the completion of the activities listed on the IRM Activities List (Format D) falling in Categories 1 or 2. (See instructions for Format D for definition of code categories.)

Anticipated benefits are defined as:

Savings: Reduction in the current level of expenditure.

Cost Avoidance: Elimination of the need for a future increase in expenditures.

- 1. BUREAU/OFFICE: Insert the name of the bureau/office completing this document.
- 2. ACTIVITY NUMBER: Insert the appropriate activity number from the IRM Activities List (Format D).
- FISCAL YEAR INFORMATION: Insert the fiscal year for each year of the planning period.

For each fiscal year, (FY through FY and beyond FY), indicate in the appropriate category the anticipated savings and cost avoidance, expressed in the thousands (\$000's).

- 4. LIFE CYCLE ANITCIPATED BENEFITS: Total the anticipated benefits for the life of the activity, expressed in the thousands (\$000's).
- 5. NARRATIVE: As necessary, concisely identify those benefits that do not lend themselves to dollar quantification, but should be considered when assessing the potential value of the investment.

EXHIBIT 13: Instructions for Completion of Anticipated Benefits - Format F

- - 6. TOTAL SAVINGS: Total the savings for each fiscal year and the life cycle of the activities.
 - 7. TOTAL COST AVOIDANCE: Total the cost avoidance for each fiscal year and the life cycle of the activities.
 - 8. TOTAL ANTICIPATED BENEFITS: Add the Total Savings and Total Cost Avoidance for each Fiscal Year and the Life Cycle Anticipated Benefits.

AM ELEMENT WENT PROGRAM ELEMENT (Check ons) HARDWARE TRANSMISSION SERVICES	4. RELATED ACTIVITY(IES)			FORMAT G
ACTIVITY SUMMARY BY INFORMATION RESOURCES MANAGEMENT PROGRAM ELEMENT PUREAU/OFFICE AND	3. SUMMARIZED ACTIVITY			

EXHIBIT 14: Activity Summary by Information Resources Management Program Element - Format G

INSTRUCTIONS FOR THE COMPLETION OF ACTIVITY SUMMARY BY IRM PROGRAM ELEMENT FORMAT G

The purpose of this document is to relate the IRM activities that the Bureau/Office will accomplish during the planning period to the five program elements which comprise the total IRM program. Complete a separate document. For each IRM program element.

- 1. BUREAU/OFFICE: Enter the name of the Bureau/Office completing this form.
- 2. IRM PROGRAM ELEMENT: Check the appropriate IRM program element this document pertains to. (Five forms will be completed by each Bureau/Office).
- 3. SUMMARIZED ACTIVITY: List in summary fashion the activities the Bureau/Office intends to accomplishfor each if the IRM program elements. Summarize IRM activities at a level so that no more than five entries will reflect the full scope of activities relating to each IRM program element.
- 4. RELATED ACTIVITY(IES): Enter the number of the activity(ies) from the IRM Activities List (Format D) that supports these summarized activities. If multiple entries are appropriate, separate each entry with a comma.

EXHIBIT 15: Instructions for the Completion of Activity Summary by IRM

Program Element - Format G

SCHEDULE BY IF	<u> </u>	1,			IUF	· / _				CHE										-
2. ACTIVITY NUMBER	_	FY				FY.				FY.		_		FY.		_	1	FY _		•
2.7.10		<u> </u>							-			_								
		一	_		H				-		_			-						•
				-		_		 				_	\vdash	_		_				•
		┝	 					┢┈	-	-			\vdash							•
						<u> </u>			┢─	-	_	_	Н			Н				•
			-			-	-	 		┝			_	_			\dashv			
		 	-	_				 	\vdash	\vdash			_	_	_	Н	\dashv			•
· · . · · · · · · · · · · · · · · ·		├	-	-	\vdash		-		-	-		-	Н			Н	_			•
		├						 	 -	-			\vdash	_		-	-			-
	+	╁	 		-	-	_		Η-	 				-		-	\vdash			
		 	-	-		-												-		•
						\vdash		-		-	_						_	\dashv		•
		-						-	-	-				,, <u></u>		Н				•
		├-						-	<u> </u>		-		\vdash			Н		-		•
		ļ				_			-				Н				_	\dashv		•
		 				<u> </u>										_		\dashv		•
						<u> </u>			-			-								•
		_	_														\vdash	-1		-
									_									_		•
	_	<u> </u>						 								_				
						<u> </u>			 											-
						_														•
		<u> </u>				<u> </u>														•
						<u> </u>									L					
						ļ	L_	<u> </u>	<u> </u>	L									ļ	
													<u></u>			ļ			_	_
															<u> </u>	<u> </u>		Щ		-
															<u> </u>				_	_
											,				_					_
																		_		
	1		"																	
	+								T											
		Ι'''			_	T					_				Γ				Γ	۰
	+	\vdash		-		 							П	Ι	Г	Π	Γ		Г	
		<u> </u>			<u> </u>		L		L	نـــا			L						RM	•

EXHIBIT 16: Schedule by Information Resources Management Activity - Format H

INSTRUCTIONS FOR THE COMPLETION OF SCHEDULE BY IRM ACTIVITY FORMAT H

The purpose of this document is to establish performance schedules for each planned IRM activity.

- 1. BUREAU/OFFICE: Insert the name of the bureau/office completing this document.
- 2. ACTIVITY NUMBER: Enter the activity number from the IRM Activities List (Format D).
- 3. SCHEDULE: The schedule covers the planning period FY ____ through FY ___ with each year divided into quarters. For each IRM activity place a △ in the quarter of the fiscal year that the activity begins, then another ▲ in the quarter that it ends. For ongoing activities, draw a dotted line through all quarters of each FY.

EXHIBIT 17: Instructions for the Completion of Schedule by IRM Activity - Format H

	Information resources management planning assumptions $f Y = 70 \ F Y = -1$	9
I. BUREAU/OFFICE		
2. NUMBER	3. ASSUMPTIONS	4. RELATED ENTRY(IES)
		FORMATI

EXHIBIT 18: Information Resources Management Planning Assumptions - Format I

INSTRUCTIONS FOR THE COMPLETION OF IRM PLANNING ASSUMPTIONS FORMAT I

The purpose of this document is to list any assumptions made in completing the other IRM Planning Guide formats and relating them, as appropriate, to specific entries.

- 1. <u>BUREAU/OFFICE</u>: Insert the name of the bureau/office completing this document.
- 2. NUMBER: Number each entry sequentially.
- 3. ASSUMPTIONS: List all assumptions your bureau/office has made in completing the IRM Planning Guide. (Assumptions may be general or specifically IRM related).
- 4. RELATED ENTRY(IES): Enter the entry(ies) to which this assumption pertains. If multiple entries are appropriate, separate each entry by a comma. If the assumption relates to all the documents, write "ALL". The entry should be recorded "F-N", so that "F" equals the format number and "N" equals the entry number or item.

EXHIBIT 19: Instructions for the Completion of IRM Planning Assumptions - Format I

SYSTEM OWNERSHIP

ROLES AND RESPONSIBILITIES

System Owner:

The System Owner has responsibility for the program which is served by the information system and is responsible for programmatic decisions based upon reports or information provided by the system. The System Owner, therefore, is someone other than the IRM support organization unless the system serves the IRM program. The System Owner is responsible for the accuracy, completeness, and timeliness of the fundamental data input to the system.

Owner Representative: An individual from the owning organization is designated as Owner Representative. The Owner Representative is responsible for ensuring that programmatic strategy is reflected in the system and for representing the end user community. Specific responsibilities include:

- o obtaining end user involvement in defining requirements for new systems and defining user requirements for system maintenance;
- o prioritizing user requests;
- o preparing business justification for all development and maintenance work;
- o defining test cases and acceptance criteria and obtaining end user participation in systems tests;
- o signing off on life-cycle phase reviews and testing results;
- o conducting user training;
- o validating the system against system objectives; and
- o ensuring that interfaces with other systems are maintained when changes are made to the system.

Ownership is also assigned for component parts of the system, such as the application software, the hardware and the data. The owner of the component parts may or may not be the same organization as the owner of the system. Inherent responsibilities also accompany the assignment of component ownership.

Hardware Owner: The Hardware Owner has the responsibility for acquiring, enhancing, adding, deleting, and maintaining the computer equipment and peripheral devices which are an element of the owned system. Specific responsibilities include:

- o developing plans, including cost and schedule, for meeting processing requests from the System Owner(s);
- o accomplishing plans as agreed upon by the System Owner(s);
- o adhering to all relevant hardware standards;
- o modifying hardware configuration to meet relevant Federal and agency policies;
- o snalyzing capacity requirements and planning and accomplishing acquisition activities necessary to accommodate future processing requirements; and
- o establishing necessary controls to assure timeliness in meeting processing requirements.

Although computing services support may be contracted for, a Hardware Owner must be designated for management purposes and to act as an interface with the contractor.

Software Owner: The Software Owner has the responsibility for maintaining the software, correcting latent defects as well as responding to programmatic changes requested by the System Owner. Specific responsibilities include:

- developing plans, including cost and schedule, for meeting maintenance requests from the System Owner which reflect programmatic changes;
- o accomplishing changes in accordance with the plan agreed upon by the System Owner;

EXHIBIT 20A: Systems Ownership - Roles and Responsibilities (Continued)

o adhering to all relevant software standards;

- o improving internals of the software system to meet relevant Federal and agency policies;
- o assuring version control; and
- o establishing necessary controls to assure integrity and security of the software.

Although computer support services may be contracted for, a Software Owner must be designated for management purposes and to act as an interface with the contractor.

Data Owner: The Data Owner has the responsibility for the integrity and security of those data elements contained within the data base. Specific responsibilities include:

- o establishing necessary controls to ensure accuracy and currency of individual data elements and periodic purging of the data elements;
- o establishing necessary controls to ensure security of access to individual data elements so that access is limited only to authorized individuals, organizations and devices;
- o defining and documenting, including user identification, all data elements contained within the database;
- o obtaining end user involvement in developing or modifying data element definitions;
- o ensuring proper documentation and maintenance of data elements and submitting documentation for inclusion in the agency data element dictionary; and
- o conforming to standardized agency data element definitions and Federal and agency data base management standards and policies.

EXHIBIT 20B: Systems Ownership - Roles and Responsibilities (Continued)

5. DEVELOPING THE PLAN - MONTH 2

5.1 Training Bureau Representatives - Week 1

The Task Force should now prepare for and conduct a training workshop for all bureau representatives to familiarize them with the planning guide. Participants should receive the guide in sufficient time to review its contents and prepare questions and comments regarding any specific items. The Task Force should pay particular attention to "cost elements" issues, so that a consistent approach will be used in preparing the training materials and in responding to form queries. Introductions between individual Task Force members and their assigned bureau representatives should also be made at this workshop.

5.2 Preparing Individual Bureau/Office Plans - Weeks 2, 3, and 4

The bureau representative, appropriate task force member, and other designated staff support personnel collaborate in the preparation of the individual bureau/office plans. They should:

- o Brief program directors on the strategic IRM planning effort and on actions that will occur during the following weeks;
- o Interview program directors, including the bureau head;
- o Complete the forms prescribed in this methodology for each of the program directors' activities;
- Verify with the program directors the accuracy of the data collected during these interviews;
- Consolidate the information and prepare a consolidated bureau/office version of the forms;
- o Brief the bureau/office head on the consolidated forms and obtain concurrence on the bureau-wide plan; and,
- o Submit the completed planning documents, under signature of the bureau/office head, to the agency Task Force.

5.3 Writing Background Portions of the Plan - Week 3

Concurrent with the preparation of individual bureau/office plans, the Task Force members should be preparing a first draft of the background portion of the plan.

Documents that require drafting include:

- o Background, purpose and objectives of the plan;
- o Agency mission and organization overview; and
- o A description of the current IRM environment.

5.4 Advising the Agency Head on Progress - Week 4

It is important at this point to brief the Steering Committee and the agency head on the status of the planning effort. Since the main purpose of the strategic plan is to support agency missions and objectives, it is imperative that senior management officials be aware of the main direction the IRM plan has taken to this point and be in agreement with it. This provides a proper time for reinforcing the need for top management support in order to complete the plan in the time allotted. This briefing also provides the opportunity for addressing any changes that may be taking place in the agency's policies, standards or guidelines. Once this briefing has been conducted, the Task Force is now ready to begin the final stage of plan development.

6. DEVELOPING THE PLAN - MONTH 3

6.1 Examining and Summarizing Individual Bureau/Office Plans - Weeks 1 and 2

The Task Force should proceed to integrate the individual bureau/office plans into a comprehensive agency-wide plan. They review all bureau/office plans and prepare executive summaries describing each. This is an important step, not only in encapsulating various data in a short and effective overview, but also in certifying that the Task Force members understand and have captured the import of the planning guide responses. The bureau/office plans are reviewed in terms of completeness and cohesiveness as well as content for input into the agency plan. The bureau/office executive summaries, after validation by the bureau representatives, are included in the Executive Summary of the agency plan and serve as a cover sheet for each bureau/office planning submission contained in Volume II.

6.2 Briefing the Review Committee - Week 2

The Task Force briefs the Review Committee on general progress and content of the plan. The Committee is provided with: a draft of the background information to the plan; the executive summaries; and the cost analyses, tables and charts prepared by the Task Force to graphically portray the existing IRM environment. The Review Committee gives their guidance and approval to the existing approach.

6.3 Integrating Responses and Analyzing Program Elements - Week 2

The Task Force reviews the individual bureau/office plans and determines if duplications or omissions exist in any areas. Conflicts are resolved with Bureau representatives and modifications agreed upon.

Each of the five IRM program elements is assigned to a member of the Task Force for a comprehensive examination of all related bureau/office submissions and preparation of the appropriate segment of the agency plan. Based on the analyses, it is decided from an agency-wide perspective what the long-range objectives should be for each and the strategy for achieving them.

6.4 Developing a Draft of the Agency-Wide Plan - Week 3

The Task Force is now prepared to piece together an initial draft of the plan. This consists of a catalog describing all operating information systems within the agency; bureau plans compilation; the overall agency plan; and an executive summary with a foreward to be signed by the agency head. Concurrently, arrangements are made for editorial review and printing of the plan.

When the initial draft is completed, the Task Force forwards the plan to the Review Committee for their reactions and comments. To adhere to the tight time constraints of the planning schedule, a quick turn-around is required. Suggested changes are then incorporated and a final draft is prepared and edited.

At this time, the Task Force also develops a letter for transmittal to the agency head discussing any unresolved issues or problems, and stating that a copy of the draft plan is being submitted to the Executive Steering Committee for their endorsement. A copy of this letter is also provided to the Committee for its consideration.

At the end of this phase the Team Leader delivers the draft plan to the agency head and Steering Committee for review so that needed changes can be reflected prior to the final printing.

6.5 Concurring on the Final Plan - Week 4

The Executive Steering Committee concurs on the final planning document and submits it to the agency head for approval. The agency head indicates formal approval and adoption of the plan by signing the Foreward in the executive summary. The Executive Steering Committee arranges for distribution of the Plan to all bureau/office heads and managers for their implementation.

7. IMPLEMENTING THE PLAN - ONGOING

The issue of effective implementation of the 5-year strategic IRM plan is a critical one. It serves as the key to accomplishing a satisfactory cost-benefit relationship of an agency's planning efforts. In order to be successful the following issues are extremely important to keep in mind--

- o Establish a direct relationship between strategic plans and budgets, enabling budget and program managers to have more explicit responsibility for their part(s) of plan implementation and to communicate their concerns.
- o Break down relatively complex overall planning projects into easily definable elements that can be effectively managed and monitored.
- o Continue sponsorship for implementation of the strategic IRM plan.
- o Demonstrate that strategic IRM planning is extremely beneficial, to all organizational levels, by means of positive results produced quickly.
- o "Buy in" to the strategic planning philosophy through active participation by line and functional managers.
- o Assess realistic resource needs and allocate necessary resources to planned activities. Top management must recognize the need for their on-going commitment.
- o Maintain a vital and creative plan, rather than performing quick updates of the previous plan or having to totally replan every year. Make adjustments, as needed, to the kinds of information collected and the approach taken.

These are only a few of the implementation issues that agencies should be prepared for once the Strategic IRM Plan has been signed and issued. Implementation of the plan should become just as much a part of the agency's day-to-day operations as its other work activities.

Once the Strategic IRM Plan is approved, tactical plans are developed for each IRM activity. By following the procedures and structures prescribed by this planning methodology, the agency should be readily able to identify individuals assigned ultimate responsibility for each planned IRM activity. As the tactical plans are developed, the office designated responsibility for overseeing management of the agency's IRM plan concurrently develops a control system for tracking agency performance against the plan. The designated office should actively monitor the progress of activities' tactical plans, alerting appropriate managers when potential problems appear to be emerging.

A memorandum, endorsed by the Executive Steering Committee, is issued by the agency head stressing the importance of continued support to the plan during its implementation phases, reaffirming the responsibility of bureau/office heads for accomplishment of assigned IRM activities, and outlining steps to be taken should any delays or problems be incurred in meeting activity timeframes and resource consumption schedules. These procedures should include—

- Notification to the designated office overseeing plan implementation that the activity is not on track;
- o Circumstances involving the delay and planned corrective actions:
- o Impacts on other related IRM activities; and
- o New schedules for completion.

Once this information is provided, appropriate briefings can be prepared for the Executive Steering Committee, and modifications or annotations can be made to the official strategic IRM plan.

In preparation for quarterly meetings of the Executive Steering Committee, the designated office should also routinely--

- o Review planning assumptions and modify them as necessary;
- o Note progress, problems that may have materialized during the quarter, prioritizing new and existing activities; and
- o Coordinate procurement actions with activities contained in the plan.

The results of these reviews are then communicated directly to key managers of the agency, lending further credibility to the IRM planning effort and enhancing commitment of management to its success.

INSTITUTIONALIZING THE PROCESS - ONGOING

The Strategic IRM Plan should be updated annually, complementing the agency's budget process. To initiate the update process, the Executive Steering Committee reconfirms agency missions and objectives, validates policies governing the agency's IRM program, identifies planning assumptions and constraints, and provides any needed redirection to the planning effort as appropriate. The designated planning office is then able to reissue the planning call, incorporating changes that the Steering Committee has made and requesting each bureau/office to—

- o Review functions, objectives, assumptions and constraints;
- o Reassess their information needs and identify needed improvements;
- o Review their individual IRM activities; and
- o Establish new or validate current IRM activities, submitting them in the format as described in this report.

Strategic IRM planning remains meaningful only as long as it continues to relate to the real-world environment of the agency. As events redirect planned IRM activities or as revisions to requirements emerge, changes must be made to the plan. In essence, plans should be "living" documents, changing as programmatic direction and priorities fluctuate or as planning assumptions change. If the strategic plan is to remain a meaningful and useful document, activity modifications must be identified and analyzed as to their impact on resource projections and other planned activities. And although a formal update to the plan should occur at least annually in conjunction with budget formulation, procedures should be established to permit modifications to the plan during the year as needed.

m It c. Covernment Drinting Affice + 108t - 471-964